

the collapse of the lung and the thickness of the fibrin coat overlying it. Much depends on the proper placing of the original drainage opening and a satisfactory removal of carious ribs. It is certain too that systematic breathing exercises combined with antiseptic lavage of the cavity will hasten the closure of the sinus. In empyemata the retention of a shell fragment or other foreign body was seen to have an unfavorable influence on the possibility of the soldier's return to duty, and at least one-third of the empyema cases had ultimately to be discharged from military service as unfit simply on account of the chest condition. The mortality from chest wounds in France are also considered. It has been fully demonstrated that thoracic operations are quite practicable under military conditions in the field. It has been found that the pleural cavity may be freely opened under ordinary local or general anesthesia and the lung manipulated without any fear of immediate physiological disturbances. It is essential that infection shall neither be spread broadcast nor introduced by drainage of the pleural cavity at the end of the operation. However, although the results are often striking they are not always favorable, and comparison by statistics will need to be made with the results of the older more conservative treatment in order to see which kind of chest wounds are best suited for treatment by the new methods. Deaths after chest wounds are caused either by primary hemorrhage or by infection in the chest. All deaths occurring on the first day may be ascribed to the former, while all deaths from the second day onward are due to the latter. Sepsis is twice as frequent with wounds by shell fragments as with those by rifle bullets. About 10 to 15 per cent. die at an early date from the severity of the wound and about 10 per cent. may die later at the evacuation hospital from complicating sepsis. Among those cases developing sepsis within the chest the mortality is very high, rising to nearly 50 per cent. under the present treatment by rib resection and drainage. The old conservative routine of surgical non-intervention, except by late drainage, shows good results in those cases of gunshot wounds of the chest which remain non-infected—that is about 75 per cent. But the septic cases demand the newer practice of prophylactic cleansing operations, performed at an early hour, on certain carefully chosen groups of cases.

Psychological Examining in the Army.—MAJOR M. YERKES, Sanitary Corps, National Army, Section of Psychology, Office of the Surgeon-General says the Medical Department of the Army has undertaken to test thoroughly the military serviceableness of certain methods of psychological examining. This is being done in accordance with carefully formulated plans in four National Army cantonments (Camp Devens, Dix, Lee, and Zachary Taylor) and in one Officers' Training Camp. The methods which are being applied were especially prepared for use in the Army by a Subcommittee of the National Research Council. In order that all enlisted men might be examined expeditiously a procedure suitable for the examining of groups was devised. This permits a single examiner to make measurements simultaneously of the intelligence of from 100 to 200 men. In briefest outline the handling of men by organizations is as follows: A company is reported at a given place for psychological examination. If its strength does not

exceed the capacity of the examining room it is taken as a unit and settled for examination. The first step is to divide the organization into two special groups, the one of which consists of men who are capable of reading and writing English fairly well, the other of those uneducated or foreign-born individuals who are not able to read and write English satisfactorily. This segregation of the original group or company is accomplished by means of a simple literacy test. As soon as this initial test is completed the group of illiterates is ordered to another examining room, where a form of group examination suitable to those who have but slight knowledge of English is given. The group of literate subjects proceeds in the original examining room with a special examination for the measurement of intelligence. In neither of the group examinations is any considerable amount of writing demanded. The aim is rather to obtain reliable indications of the ability of individuals to respond to different types of situation by having them make relatively simple movements, such, for example, as under-scoring or crossing out words, making crosses in the proper places, constructing simple objects, reproducing or completing diagrams and other figures and so on. The principal purposes of psychological examining in the Army are: (1) To discover those men who by reason of intellectual deficiency or peculiarity of mental constitution are either unfit or undesirable for military service. (2) To supply a practically reliable intelligence rating or rank for every enlisted man which shall assist his Company Commander in placing him wisely and using him effectively for military purposes. (3) To supply mental measurements which shall be of value in connection with the selection of men for non-commissioned or commissioned appointments and for special lines of skilled service. Psychological examining has been in progress since early in October. Up to December 1 approximately 60,000 enlisted men of the National Army, 4000 commissioned officers, and 1000 candidates for appointment in an Officers' Training Camp had been examined and the results reported to the proper medical officer, company commander, or commanding general of the division. Among the enlisted men from 5 to 10 per cent., varying with organization and race, were reported as intellectually very inferior. Of this number from 1 to 2 per cent. were designated as cases of mental deficiency whose discharge from the army seemed eminently desirable. For each company examined, report of intelligence ratings was immediately supplied to the company commander. Official reports indicate that this psychological information has been of service to many officers in connection with the training of their organizations. Repeatedly commanding officers on receiving psychological reports have requested the special and individual examining of certain men who, because of disorderly conduct or inability to learn, have proved themselves to be difficult problems. The examining of officers or of candidates for appointment has yielded results which correlate most satisfactorily with the expert opinion of military men. Certain organizations have already made use of intelligence ratings as an aid in equalizing the strength of the commissioned personnel of their various subdivisions. Everything indicates that psychological examining as at present conducted in the Army has strictly military as well as medical reference and significance. Its results can be used alike effectively to strengthen

organizations by ridding them of unsuitable material and by placing individuals, and especially those of superior ability, where they can be of greatest service. It is clear from this preliminary trial of psychological examining that the organizing of military groups should rest upon adequate knowledge of the mental characteristics of individuals as well as on like knowledge of their physical qualifications and military training or experience.

Public Health and Control of the Liquor Traffic.—LORD D'ABERON (*Jour. State Med.*, 1917, xxv, 321), who is Chairman of the Central Control Board (Liquor Traffic), suggests in the opening remarks of his address that health officers have not given as much attention to this subject as it deserves. It is true that it is only quite recently that health officers have taken action in relation to the control of alcoholism; though it has not been from lack of appreciation of its importance, but rather from a well-founded fear that active warfare against the unscrupulous liquor interests would end disastrously for public health. Health officers, as have most medical men, tried by every means to educate the public to an appreciation of the evils of alcohol. They have usually and wisely refrained from taking an active part in securing restrictive or prohibitive legislation. Lord d'Aberon believes that the discouragement to the use of distilled liquors and the shortening of the hours of sale have had a marked effect in decreasing drunkenness and other alcoholic diseases. He gives figures for each of the four years, 1913-1916. In 1914 there was no restriction, but the laws went into effect midway in 1915. The comparison is best made, then, between 1914 and 1916. The deaths from all diseases in England and Wales connected with alcoholism decreased 43.9 per cent. (for males 41.5 and for females 47.1). The decrease for cirrhosis of the liver (not certified as alcoholic) was 23.1 per cent. (for males 17.1 and for females 31). It was admitted that a part of the decrease for males might be due to the absence of so many men at the front, but the speaker said that most of the deaths from alcoholism are of persons over forty years of age and that few chronic alcoholics are accepted for service. Naturally, a chronic process, like cirrhosis of the liver, is less affected than are acute manifestations. Figures from Liverpool were presented as of particular value, as the mortality figures were secured from Dr. Hope, the distinguished health officer of that city. The deaths from delirium tremens in Liverpool decreased during the time mentioned above from 366 to 128 for males and from 145 to 77 for females. Other forms of death from excessive drinking fell from 85 to 35 for males and from 41 to 14 for females. At the same time arrests for drunkenness fell from 13,201 to 6277. The speaker had no doubts that the restrictive measures have not only reduced common drunkenness, but in an almost equal degree cut down the diseases and physical disability due to the use of alcohol, and have in this measure improved the public health.

C. V. C.